Remarks

Status

· Claims 78-109 are pending in the application. The Examiner rejected all of the pending claims. Claims 91 and 98 are amended. Claims 102-109 have been added. Claims 78, 91, 98, 102 and 107 are the independent claims. The rejection of all the claims is traversed.

Discussion

The Examiner rejected claims 78-101 under 35 U.S.C. §102(e) as being anticipated by *Alexander et al. (U.S.P. 6,177,931)*. The Applicant points out that it is well settled that a reference may anticipate a claim within the purview of 35 U.S.C. §102 only if all the features and all the relationships recited in the claim are taught by the reference either by clear disclosure or under the principle of inherency (i.e., *W.L. Gore & Assocs. V. Garlock, Inc.,* 721 F.2d 1540, 220 USPQ 303, 313 (Fed. Cir. 1983); *Carella v. Starlight Archery,* 804 F.2d 135, 138, 231 USPQ 644, 646 (Fed. Cir.); *RCA Corp. v. Applied Digital Data Sys., Inc.,* 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984); and *Lindermann Maschinenfabrik GmbH v. American Hoist & Derrick Co.,* 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984)). Applicant submits that *Alexander et al.* clearly do not teach (or suggest) all of the features and relationships recited in the claims as required for a *prima facie* case of anticipation under 35 U.S.C. §102. Accordingly, the rejections are respectfully traversed.

Initially, the Applicant reminds the Examiner that a reference may anticipate a claim within the purview of 35 U.S.C. §102 only if **all** the features and **all** the relationships recited in the claim are taught by the reference either by *clear disclosure* or *under the principle of inherency*.

Claim 78 is directed to a method for generating a subscriber profile for a subscriber of television services. The method includes monitoring subscriber television viewing interactions; retrieving content characteristics associated with content included in the subscriber television

viewing interactions; processing the subscriber television viewing interactions and the content characteristics to generate subscriber television viewing habits; *retrieving heuristic rules associated with at least some subset of the subscriber television viewing habits, wherein the heuristic rules associate the subscriber television viewing habits with non-television viewing characteristics about the subscriber; and applying the heuristic rules to the at least some subset of the subscriber television viewing habits to generate the subscriber profile.*

The applicant submits that *Alexander et al.* do not teach (or suggest) the method of claim 78. For example, *Alexander et al.* do not teach (or suggest) *retrieving heuristic rules that associate subscriber television viewing habits with non-television viewing characteristics about the subscriber* or *applying the heuristic rules to the subscriber television viewing habits to generate a subscriber profile.*

As defined in the application, the heuristic rules may be logical rules or may be rules expressed in terms of conditional probabilities (page 11, lines 27-29). Fig 10A and the associated text from page 21, line 12 – page 22, line 1 illustrate and describe exemplary logical heuristic rules. For example, the heuristic rules equate an individual watching the soap opera "Days of our lives" with a housewife (1050). The heuristic rules also equate higher frequency of channel changes to higher income, as illustrated a user who zaps once every 2 minutes and 42 seconds is associated with an income of greater than $75,000 (1010). Fig. 10B and the associated text from page 22, line 2 – page 22, line 10 illustrate and describe exemplary probabilistic heuristic rules. The exemplary heuristic rules define probabilities of demographic make-up of a user based on the category of programming they are viewing. For example, the heuristic rules assign an individual watching the news a 40% probability of being over the age of 70, a 40% probability of making between $50K - $100K, a 50% of being a single member family, and a 70% chance of being female. It is clear that the exemplary heuristic rules described in the application are related to viewing characteristics (i.e., watching soap opera, watching the news) and predict traits that are not related thereto (i.e., housewife, 40% probability of income between $50K - $100K).

On page 2 of the Office Action, the Examiner asserts that "retrieving heuristic rules associated with at least some subset of the subscriber interactions" is met by "profile program 'learns' or performs 'sophisticated analysis', col. 29, line 55 – col. 30, line 44" and that "wherein

the heuristic rules associate subscriber television viewing habits with non-television characteristics about the subscriber" is met by "an individual viewing habits compared with the profile of others, col. 30, lines 38-44, wherein the profile of others include demographic characteristics or non-television viewing characteristics, e.g., 'zip code', see col. 28, lines 11-21". On page 3 of the Office Action, the Examiner asserts that "applying the heuristic rules to the subscriber interactions to generate the subscriber profile" is met by "(col. 30, lines 1-44)". The Applicant respectfully submits that the Examiners assertions are clearly erroneous.

A reference may anticipate a claim within the purview of 35 U.S.C. §102 only if all the features and all the relationships recited in the claim are taught by the reference either by *clear disclosure* or *under the principle of inherency*. The Applicant submits that the retrieval and application of heuristic rules as recited in claim 78 is not taught by *Alexander et al.* either by *clear disclosure* or *under the principle of inherency*.

Clear Disclosure - Applicant submits that none of the passages cited by the Examiner, nor the entire application for that matter, disclose heuristic rules that associate subscriber television viewing habits with non-television viewing characteristics about the subscriber, let alone retrieving the heuristic rules for at least some subset of the subscriber television viewing habits, or applying the heuristic rules to the at least some subset of the subscriber television viewing habits to generate the subscriber profile, as required by claim 78.

To the contrary, the passages referred to by the Examiner simply discloses varying levels of analysis (e.g., "the Profile Program 'learns' to *recognize* a finer breakdown about the various types of data collected and then uses the learned information to describe a 'Viewer Preference'" (col. 29, lines 56-67); "Profile Program performs multiple levels of sophisticated *analysis* and *learning* involving numerous *comparisons* of the basic viewer profile data and the simple statistics collected about a particular viewer to develop Viewer Characteristics" (col. 30, lines 1-16); and "the types of interactions in both sets of circumstances are *analyzed* ... the Profile Program determines Viewer Characteristics ... Over time with sufficient data the EPG *characterizes* ... a broad range of various other Viewer Characteristics" (col. 30, lines 17-37).

As the Examiner has failed to point out a *clear disclosure* in *Alexander et al.* of all the elements and all the relationships (e.g., the retrieval and application of heuristic rules) as recited

in claim 78, Applicant submits that the Examiner has clearly not proven a *prima facie* case of anticipation by *clear disclosure.*

The Principle Of Inherency - It is a well settled principle that for an element or relationship to be inherent that it must necessarily be present in the thing described in the reference and that it would be so recognized by persons of ordinary skill (i.e., *Continental Can Co. USA v. Monsanto Co.*, 948 F.2d 1264, 20 USPQ 2d 1749 (Fed. Cir. 1991); *In re Sun*, 31 USPQ 2d 1451, 1453 (Fed Cir. 1993)). Inherency may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient (i.e., *In re Oelrich*, 666 F.2d 578, 581, 212 USPQ 323, 326 (C.C.P.A. 1981)).

Thus, while it is possible that *Alexander, et al.* retrieves heuristic rules that associate subscriber television viewing habits with non-television viewing characteristics about a subscriber and applies these rules to subscriber television viewing habits to generate a subscriber profile ("Viewer Preferences" or "Viewer Characteristics"), that is *but one possibility* and is clearly *not necessarily present.* For example, the data may be entered (e.g., "The EPG requests that the viewer provide certain profile information ... the viewer's top favorite channels; the viewer's favorite types of channels, and the times which the viewer is most likely to watch television" (col. 28, lines 12-21); "the EPG is capable of distinguishing between individual viewers ... each viewer has an individual PIN or other identification number ... each viewer uses an individualized remote" (col. 28, lines 23-29)).

As the Examiner has failed to point out that all the elements and all the relationships (e.g., the retrieval and application of heuristic rules) as recited in claim 78 are taught by *Alexander et al. under the principle of inherency,* the Applicant submits that the Examiner has clearly not proven a *prima facie* case of anticipation *under the principle of inherency.*

The Applicant submits that the Examiner is clearly reconstructing the prior art with the hindsight of the current invention as the *Alexander et al.* reference clearly does not teach the retrieval and application of heuristic rules as recited in claim 78 by clear disclosure or by the principles of inherency as required to assert a *prima facie* case of anticipation. That is, there is *no* disclosure in *Alexander et al.* of heuristic rules and the heuristic rules are clearly not inherent as other possibilities exist and are actually disclosed in *Alexander et al.*

For at least the reasons disclosed above, the Applicant submits that claim 78 is clearly patentable over the cited references. Claims 79-90 depend from claim 78 and are submitted to be patentable over the prior art for as least the reasons addressed with respect to claim 78 and for the further features recited therein. The rejection of claims 78-90 accordingly should be withdrawn.

Claim 91 is directed to a method for generating a subscriber profile for a subscriber of television services. The method includes monitoring subscriber interactions with a television; *retrieving heuristic rules associated with at least some subset of the subscriber interactions, wherein the heuristic rules predict demographic characteristics about the subscriber including at least some subset of gender and income level; and applying the heuristic rules to the at least some subset of the subscriber interactions to generate the subscriber profile.*

The applicant submits that *Alexander et al.* do not teach (or suggest) the method of claim 91. For example, *Alexander et al.* do not teach (or suggest) *retrieving heuristic rules associated with subscriber interactions that predict demographic characteristics about the subscriber* or *applying the heuristic rules to the subscriber interactions to generate a subscriber profile* for at least reasons similar to those described above with respect to claim 78. In addition, claim 91 recites that the heuristic rules predict demographic characteristics about the subscriber including at least some subset of gender and income level. The Applicant submits that *Alexander et al.* do not disclose a demographic profile including gender and income level of the subscriber, let alone generating such a profile based on heuristic rules.

The Applicant submits that the Examiner is clearly reconstructing the prior art with the hindsight of the current invention. The Applicant submits that *Alexander et al.* do not teach all elements and all relationships of claim 91 either by *clear disclosure* or *under the principle of inherency.* Thus, the Examiner has clearly not proven a *prima facie* case of anticipation. Accordingly, claim 91 is submitted to be patentable over the cited art. Claims 92-97 depend from claim 91 are therefore submitted to be patentable over the cited references for at least the reasons discussed above with respect to claim 91 and for the further features recited therein.

For example claim 95, recites that the heuristic rules associate subscriber interactions to non-interaction traits including at least some subset of program to gender, channel change speed

to gender, channel change speed to income level, program genre to age, program genre to gender, program genre to income level, and program genre to family size. The Applicant submits that *Alexander et al.* do not teach the interaction to non-interaction trait associations of claim 95 either by *clear disclosure* or *under the principle of inherency*.

On page 5 of the Office Action, the Examiner asserts that the limitations of claim 95 are "met by the association of subscriber interactions (col. 28, line 12 – col. 29, line 1 and col. 30, lines 7-9) with specific demographic characteristics or non-interaction traits (age, married, viewer with children, col. 30, lines 17-37)" or alternatively are "met by the association of subscriber interactions (an individual profile) with viewer profile of others (col. 30, lines 38-44), wherein the viewer profile of others include demographic characteristics or non-interaction traits (e.g., 'zip code', see col. 28, lines 11-21)". The passages referred to by the Examiner simply point on interactions the subscriber may make and details that may be obtained about the subscriber, and does not provide any evidence as to whether the details about the subscriber were generated from the interactions, and if they are generated from the interactions how they are generated. The Examiner has not provided any evidence of the use of heuristic rules, let alone the use of heuristic rules that associate at least some subset of program to gender, channel change speed to gender, channel change speed to income level, program genre to age, program genre to gender, program genre to income level, and program genre to family size. Claim 95 is submitted to be patentable over the cited art for at least this additional reason.

Claim 98 is directed to a method for generating a subscriber profile. The method includes monitoring subscriber interactions with a television; processing the subscriber interactions to generate interaction traits; *retrieving heuristic rules associated with the interaction traits, wherein the heuristic rules associate the interaction traits to demographic traits, the interaction traits to demographic traits associations including at least some subset of program to gender, channel change speed to gender, channel change speed to income level, program genre to age, program genre to gender, program genre to income level, and program genre to family size; and generating the subscriber profile by applying the heuristic rules to the interaction traits.*

The applicant submits that *Alexander et al.* do not teach (or suggest) the method of claim 98. For example, *Alexander et al.* do not teach (or suggest) *retrieving heuristic rules associating interaction traits to demographic traits (e.g., channel change speed to gender, channel change speed to income level) about the subscriber* or *applying the heuristic rules to the subscriber interactions to generate a subscriber profile* for at least reasons similar to those described above with respect to claim 78.

In addition, claim 98 recites that the heuristic rules associate subscriber interactions to non-interaction traits including at least some subset of program to gender, channel change speed to gender, channel change speed to income level, program genre to age, program genre to gender, program genre to income level, and program genre to family size. The Applicant submits that *Alexander et al.* do not teach the interaction to non-interaction trait associations of claim 98 either by *clear disclosure* or *under the principle of inherency*. On page 4 of the Office Action, the Examiner asserts that the elements of claim 98 "are met by the association of at least the subset of program genre (col. 28, lines 1-21, col. 29, lines 37-67) to family size ('married' col. 30, lines 29-32), program genre to age (col. 30, lines 29-31)." The Applicant submits that the passages referred to by the Examiner simply point on interactions the subscriber may make and details that may be obtained about the subscriber, and does not provide any evidence as to whether the details about the subscriber were generated from the interactions, and if they are generated from the interactions how they are generated. The Examiner has not provided any evidence of the use of heuristic rules, let alone the use of heuristic rules that associate at least some subset of program to gender, channel change speed to gender, channel change speed to income level, program genre to age, program genre to gender, program genre to income level, and program genre to family size.

The Applicant submits that the Examiner is clearly reconstructing the prior art with the hindsight of the current invention. The Applicant submits that *Alexander et al.* do not teach all elements and all relationships of claim 98 either by *clear disclosure* or *under the principle of inherency*. Thus, the Examiner has clearly not proven a *prima facie* case of anticipation. Accordingly, claim 98 is submitted to be patentable over the cited art. Claims 99-101 depend from claim 98 are therefore submitted to be patentable over the cited references for at least the reasons discussed above with respect to claim 98 and for the further features recited therein.

Newly added independent claims 102 and 107 and dependent claims 103-106 and 108-109 respectively, are submitted for be patentable over the cited references for at least similar reasons to those advanced above.
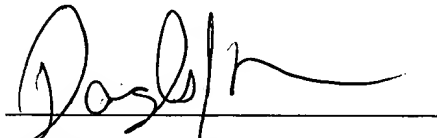
Conclusion

For the foregoing reasons, Applicant respectfully submits that claims 78-109 are in condition for allowance. Accordingly, early allowance of claims 78-109 is earnestly solicited.

If the Examiner believes that a conference would be of value in expediting the prosecution of this Application, the Examiner is hereby invited to contact the undersigned attorney to set up such a conference.

Respectfully submitted,

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